Original/Duplicate/Triplicate
CONTRACT CERTIFICATE

No: **1st and Part Bill** (For Other Works) Date……2017

Division: **Project** Sub-Division: **Project**

Bill Received No. Dated Divisional / Sub Divisional Cash Book Voucher No…… Dated……

Schedule Docket No. Head of Account: **P3089(CMC/TMC)** **Work Code: 003-16-000002** Est.Cost: **200.00 Lakhs**

Name of Work: **Developmental Works to Vivekananda Park in Ward no-03.**

Name of Contractor and Full Address: **M/s KRIDL**

Reference to Agreement No. **39 /17-18** Date: **04-07-2017**

Certified that the measurements were taken by me on 03-11-17 and recorded of Pages 1 to 18 of measurement Book No. 06/17-18 and that the work is satisfactorily executed.

181

Contractor **Officer-in-charge of work**

Assistant Executive Engineer
Byatarayanapura Sub-division
KRIDL, BBMP, Bangalore

Certified that the measurement were taken by me on ……and found correct. The work is satisfactorily executed.

Certified that the quantities of materials shown in column 3 of Account have been actually brought to site of the work and the contractor has not previously received any advance on this security. These materials are of and imperishable nature and are all required for immediate use on the work in connection with items for finished work have been agreed upon. A normal agreement signed and executed by the contractor is recorded in the office.

N. Elakshi
Asst. Executive Engineer
Project Division
Yelahanka Zone
Bangalore

Sub Division Officer

II Memorandum of Payment

1)	Total value of work done or supplies made as per account within	Total Rs — 1,86,06,504-00
2)	Deduct amount to be held in reserve being ……percent Rs……	
3)	" Balance	
4)	Deduct Payment:	
a)	Amount of previous payment as in the Office Cash Book Voucher No…Dated……S.D. No……. Amount adjusted towards cash advance recovery of	2% IT - 3,72,130-00 1% CGST - 1,86,065-00 1% SGST - 1,86,065-00 1% Cess - 1,86,065-00 0.1% CBF - 18607-00 5% FSD - 9,30,325-00 LR - 1,27,712-00
b)	Payments Now made: cost store or other material supplied. / recovery of amount creditable to this/other work / Amount paid on this bill Cheque / Cash.	
5)	Balance being unpaid value of work done held in reserve.	
6)	Deduct cash advance made on the Office cash Book Voucher No…… dated……less adjustments.	
7)	Net amount due to or from Contractor	unadjustments items. Adju - 20,06,969-00
8)	Advance to Contractor for materials brought to site (as detailed) within.	
9)	Value of Government materials supplied.	Cheque 1,65,99,535-00.
		Total amount adjusted -

Contractor's Signature

Received Rs…… (in words)……

……

by cash and by adjustment of Payment as per memorandum (in final settlement of all demands)

Assistant Executive Engineer
Byatarayanapura Sub-division
KRIDL, BBMP, Bangalore

(For use in the Office)

Audited & Admitted for Rs. Rs 1,86,06,504-00

Witness
1.
2.

Stamp

Dated Signature of Contractor

Paid by me by Cheque No……Dated……

Cash Rs……

Dated……

Initials of Officer making payment

Assistant Executive Engineer
Byatarayanapura Sub-division
KRIDL, BBMP, Bangalore

Rs 1,65,99,535-00 by Cheque and Rs. 20,06,969-00 by Adjustment

Executive Engineer

Accts. Supdt.
Project Division
B.B.M.P.

Exe. Engineer
Project Division
B.B.M.P

BRUHAT BANGALORE MAHANAGARA PALIKE
YELAHANKA ZONE, PROJECT DIVISION

Name of Work: Developmental Works to Vivekananda Park in Ward no-03

Sl No	Item Name	Unit
1	Earthwork excavation for foundation of buildings, water supply, sanitary lines and electrical conduits either in pits or in trenches 1.5m and above in width, in hard soil not exceeding 1.5 m. in depth including dressing the bottom and sides of pits and trenches, stacking the excavated soil clear from edges of excavation with lead upto 50 m. after breaking of clods complete as per specifications, specification. No. KBS 2.1(b)/2:3.5 (BCSR 2016-2017, Page 5, Item No 2.4)	cum
2	Providing and laying in position plain cement concrete of mix 1:4:8 with OPC cement @ 180kgs, with 40mm and down size graded granite metal coarse aggregates @0.85cum and fine aggregates @ 0.57cum machine mixed, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation, including cost of all materials, labour, HOM of machinery, curing complete as per specifications.Specification No. KBS 4.1,4.2 (BCSR 2016-2017, Page 12, Item No 4.3)	cum
3	Providing and constructing granite / trap / basalt size stone masonry in foundation with cement mortar 1:6 stone hammerd dressed in courses not less than 20 cms high, bond stones at two m. apart in each course including cost of materials, labour, curing complete as per specifications. KBS 5.1.13 (I No-34.8.2,P No-254)	cum
4	Providing and constructing granite / trap / basalt size stone masonry in superstructure with cement mortar & edges of stones chistle dressed in courses not less than 15 cms high, bond stones at two m. apart in each course including cost of materials, labour, scaffolding, curing complete as per specifications. KBS 5.1.13 - do - with cement mortar 1:4 (I No-34.10.2,P No-254)	cum
5	KSRB 4-1 .6 ; Providing and laying in position **plain cement concrete of mix 1:2:4** with cement@ 240kgs, with 20mm and down size graded granite metal coarse aggregates @ 0.878 cum and fine aggregtes @ 0.53cum, machine mixed, concrete laid in layers not exceeding 15 ems. thick, well compacted, in foundation, plinth and cills, ncluding cost of all materials, labour, HOM of machinery, curing complete as per specifications.(BCSR 2016-2017, Page 12, Item No 4.6)	cum
6	KSRRB 300-58. Compaction of original ground with maximum of 6 passes of 8 to 10 tonnes power roller including filling in depression occuring during rolling including cost of all labour, HOM of machinery complete as per specifications. MORTH / Chapter 3 (P.No-149, I No-19.64)	Sqm
7	KSRRB M300-Construction of Embankment with Material Gravel/Murrum KSRRB M300-53. Construction of embankment with approved material Gravel /Murrum with all lifts and leads, transporting to site, spreading, grading to required slope and compacting to meet requirement Table 300-2 complete as per specifications, including cost of gravel / murrum, watering charges & compaction by vibratory roller to 95% of proctors density. MORTH Specification No. 305.(BCSR 2016-2017, Page 148, Item No 19.60)	cum
8	KSRB 2.6 : Providing and filling sand in foundation upto plinth to required depth for sub soil treatment including watering ramming with all lead and lift complete as per specifications, specification. No. KBS 2.10.2 (BCSR 2016-2017, Page 6, Item No 2.13)	cum

Previous Measurements		Present Measurements			Total Up to Date		Remarks
Qty	Amount	Qty	Rate	Amount	Qty	Amount	
-	-	1953.41	437.64	854890.35	1953.41	854890.35	
-	-	169.69	5256.36	891951.73	169.69	891951.73	
-	-	380.53	4521.96	1720741.44	380.53	1720741.44	
-	-	369.21	5824.44	2150441.49	369.21	2150441.49	
-	-	53.06	5876.28	311795.42	53.06	311795.42	
-	-	4410.00	5.40	23814.00	4410.00	23814.00	
-	-	1659.14	326.16	541145.10	1659.14	541145.10	
-	-	227.73	2305.80	525099.83	227.73	525099.83	

Sl No	Item Name	Uni
9	KSRB 4.2.2 : Providing and laying in position reinforced cement concrete of Design mix M20 with OPC cement @ 320kgs, with 20mm and down size graded granite metal coarse aggregates @0.69cum and fine aggregtes @ 0.460 cum, with super plasticisers @ 3 liters confirming to is 9103-1999 reafirmed-2008, machine mixed, concrete laid in layers not exceeding 15 cms thick, vibrated for all works in foundation for footings, pedastals, retaining walls, return walls, walls (any thickness) including attached pilasters, columnspillars, posts, stmts, buttresses, bed blocks, anchor blocks & plinths etc., including cost of all materials, labour, HOM of machinery, curing, complete but excluding cost of reinforcement as per specifications. Specification No. KBS 4.1,4.6 (BCSR 2016-2017, Page 13, Item No 4.11)	cur
10	KSRB 4.9.2: Providing TMT steel reinforcement for RCC works including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery complete as per specifications. Specification No. KBS 4.6.3. - do - TMT bars Fe 500. (BCSR 2016-2017, Page 17, Item No 4.46.2)	Tn
11	KSRB 4-6.1 : Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for foundations, footings, bases of columns for mass concrete including cost of all materials, labour complete as per specificaitons. Specification No. KBS 4.6.2 (BCSR 2016-2017, Page 15, Item No 4.28)	Sqn
12	KSRB 4-7 : Providing 2 legged scaffolding for stone masonry work using 10-15 cms. dia best quality casurina poles of 4m over all length (3m +0.5m projection + 0.5m In to the ground), the distance between two rows being 1.25m and spacing of posts being 2m in both rows with 2 horizontal posts with,0.5 mm overlap on either side and braces at 2 m c to c including longitudinal and transveres middle braces to step up and providing platform with casurina poles, forms tied up using coir rope complete as per>specifications. Specification No. KBS Scaffolding for stone masonry converted to cum. (BCSR 2016-2017, Page 17, Item No 4.43.2)	cum
13	Providing and fixing for flooring 20mm thick gang saw water cut sadarhalli grey granite in CM 1:4 proportion, cut to required shape, pattern with paper joints, finished with cement mortar using white cement and colour pigments to match the colour of slab making through jointing with sealant, groves in joints including cost of curing - do - minimum width of 900mm (BCSR 2016-2017, Page 109, Item No 14.61.2)	Sqm
14	Providing full nosing for 20mm thick granite slab using required machinery including costand conveyance of all materials, labour for all items of work, HOM of equipment etc., complete as per specification (BCSR 2016-2017, Page 108, Item No 14.55)	m
15	KSRB15-3.10 : Providing 20mm thick cement plaster in single coat with cement mortar 1:3, to stone masonry & concrete surface including rounding off corners wherever required smooth rendering,: Providing and removing scaffolding, including cost of materials, labour, curing complete as per specifications. (BCSR 2016-2017, Page 114, Item No 15.18)	Sqm

Previous Measurements		Present Measurements			Total Up to Date		Remarks
Qty	Amount	Qty	Rate	Amount	Qty	Amount	
-	-	119.47	6491.88	775584.90	119.47	775584.90	
-	-	6.67 ~~6.68~~	76329.00	509114- ~~509877.72~~	6.67 ~~6.68~~	509114.00 ~~509877.72~~	
-	-	240.66	249.48	60039.86	240.66	60039.86	
-	-	1332.25	245.16	326614.41	1332.25	326614.41	
-	-	706.39	2040.12	1441120.37	706.39	1441120.37	
-	-	457.00	257.04	117467.28	457.00	117467.28	
-	-	363.75	279.72	101748.15	363.75	101748.15	

Sl No	Item Name	Unit
16	KSRB 15-16.1 : Providing and finishing external walls with primer in two coats with waterproof cement paint of approved brand and shade to give an even shade after thpoughly brooming the surface to remove all dirt and loose powdered material, free from mortar drops and other foreign matter cost of materials, labour, complete as per specifications. (BCSR 2016-2017, Page 118, Item No 15.53.2)	Sqm
17	Fabrication supplying and erecting M.S. tubular trusses of all spans as per approved drawing & design with prefabricated steel applications using quality material and are durable, reliable and corrosion and abrasion resistant. Welding shall confirm to latest structural welding code. Quality shall be on various parameters like shape, size, design gauge and polish. The entire trusses is anchored in RCC column by using 4 nos of M.S. anchor bolts at each support with 10mm thick base plate and shoe plate. The work includes cutting, straightening, placing in position of M.S. pipes and welding wherever necessary and applying one coat of redoxide primer coat to all the members including cost of all materials, labour charges, and hire charges of machineries for cutting, welding, grinding and erectiorrequipments, with all lead and lift, transportation, letc., complete as per specification (BCSR 2016-2017, Page 40, Item No 7.29)	kgs
18	Providing and installing of pre painted Galvolume iron Trapezoidal profiled sheet of approved make 1060 mm width (1000 mm cover width), 28-30 mm crest height with crest distance of 200 mm c/c with 2 ribs at the centre for stiffening. The total coated thickness (TCT) of the sheet will be 0.47 mm +/- 0.02 mm tolerance Zinc-Alu Alloy coating AZ150 gsm as per ASTM 1397/A755-550 mpa steel grade, 5-7 microns epoxy primer on both side of the sheet and polyester top coat 20-22 microns using self drilling/self tapping screws of 25 mm length, to be fixed over the existing purlins, rafters, channels and trusses. (BCSR 2016-2017, Page 300, Item No 38.30)	Sqm
19	Providing and installing of approved make pre painted Galvaiume iron Accessories, like, plain, ridges, plain gutter, plain flashing, corner Trim, etc. The total coated thickness (TCT) of the sheet shall be 0.47 mm +/- 0.02 tolerance mm Zinc-Alu Alloy coating AZ150 gsm as per ASTM 1397/755 -550 mpa steel grade, 5-7 microns epoxy primer on both side of the sheet and polyester top coat 20-22 microns using self drilling I self tapping screws of 25 mm length, (width upto 500-600 mm only), to be fixed over the existing purlins, rafters, channels / and trusses. (BCSR 2016-2017, Page 302, Item No 38.31)	Sqm
20	KSRB 15-18.1 : Applying red lead ready mix priming coat over new steel or other metal surface including preparing the surface ' 'after throughly cleaning oil, grease, dirt and other foreign matter, and scoured with wire brushes, fine steel wool, sand papers including cost of materials, labour, complete as per specifications. (BCSR 2016-2017, Page 121, Item No 15.73)	Sqm
21	KSRB 15-18.2 : Providing and applying enamel metal paint two coats (excluding priming coat) over new steel or other metal surface brushing to give an even shade after cleaning oil, grease, dirt and other foreign matter, including cost of materials, labour, complete as per specifications. (BCSR 2016-2017, Page 121, Item No 15.74)	Sqm
22	Vaccum de-watering with vaccum pump and suction mat and compaction with skin floater dubbed with floating disc including cost of generator, HOM of machinery, Screed Vibratory, Power Floater, blade and disc etc., with all lead and lift. (BCSR 2016-2017, Page 12, Item No 4.5)	Sqm

Previous Measurements		Present Measurements			Total Up to Date		Remarks
Qty	Amount	Qty	Rate	Amount	Qty	Amount	
-	-	416.92	90.72	37822.98	416.92	37822.98	
-	-	14331	118.80	1702522.80	14331.00	1702522.80	
-	-	351.21	831.60	292066.24	351.21	292066.24	
-	-	0.00	0.00	0.00	0.00	0.00 -	
-	-	516.00	31.32	16161.12	516.00	16161.12	
-	-	516.00	88.56	45696.96	516.00	45696.96	
-	-	176.00	97.20	17107.20	176.00	17107.20	

Sl No	Item Name	Unit
23	KSRRB M2600-3. (ii) Providing & fixing 20 mm thick compressible fibre board in expansion joint complete as per drawing & Technical Specification complete as per specifications MORTH'Specification No. 2605 (BCSR 2016-2017, Page 243, Item No 31.3)	m
24	KSRRB M2600-5.(iv) Providing and filling joint sealing compound as per drawings and technical specifications with coarse sand and 6 per cent bitumen by weight complete as per specifications MORTH Specification No. 2605 (BCSR 2016-2017, Page 243, Item No 31.5)	m
25	Fabrication supplying and erecting **Basket over Prelaminated board 19 mm thick** of approved lamination on both side fixed over the pillar	Sqm
26	Providing **chain link fencing** 50mm size of 8 guage properly stretched between existing rectangular poles and fixed with suitable bolts & nuts, the free ends shall be welded to the pole and block pipe at top and bottom as required including cost of all materials, labour, lead and lifts and as per the directions of the Engineer-in-charge of work including two coats of approved quality paint over one coat of shop paint (BCSR 2016-2017, Page 262, Item No 37.3)	Sqm
27	Supplying and fixing **M.S. Rectangular poles** made out of 2 equal angles of 65x65x6 mm welded together and fixed in CC (1 :2:4) WITH 2 NOS 16mm dia M.S. hold fast rods each of length 25 ems. Including cost of all materials cutting, bending scaffolding wherever necessary, nicely finishing the welded joints with all lead lifts and as per the directions of the Engineer-in - charge of the work and including providing 2 coats of approved quality paint over one coat of shop painting (excluding cost of earthwork and concrete) (BCSR 2016-2017, Page 262, Item No 37.2)	m
28	Providing and fixing **M.S. Block pipe** of 38mm dia, of heavy guage of 14 including removing the bends, cutting the pipe, and fixing pipe in between the existing two verticle poles (M.S. rectangular poles) and spot welding the chain link with M.S. block pipe including cost of all materials wastage in cutting, and scaffolding wherever necessary with all lead and lift as directed by the Engineer-in-charge of work etc., complete including two coats of approved quality paint over one coat of shop paint (BCSR 2016-2017, Page 262, Item No 37.4)	m
29	KSRRB M400-17 : Providing, laying, spreading and compacting graded stone aggregate to wet mix macadam specification including premixing the material with water at OMC in mechanical mix plant carriage of mixed Material by tipper to site, laying in uniform layers with paver in sub- base / base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications (BCSR 2016-2017, Page 158, Item No 20.18)	Sq
30	KSRB 14.6-1: Providing and laying **heavy duty cobble stones 60mm** thick interlock pavers, using cement and course sand for manufacture of blocks of approved size, shape and colour with a minimum compressive strength of 281 kg per sqm over 50mm thick sand bed (average thickness) and compacting with plate vibrator having 3 tons compaction force thereby forcing part of sand underneath to come up in between joints, final compaction of paver surface joints into its final level, including cost of materials, labour and HOM of machineries complete as per specifications. Specification No. KBS (BCSR 2016-2017, Page 101, Item No 14.6-1)	Sq

Previous Measurements		Present Measurements			Total Up to Date		Remarks
Qty	Amount	Qty	Rate	Amount	Qty	Amount	
-	-	0.00	0.00	0.00	0.00	0.00	
-	-	0.00	0.00	0.00	0.00	0.00	
-	-	0.00	0.00	0.00	0.00	0.00	
-	-	352.80	711.72	251094.82	352.80	251094.82	
-	-	62.50	884.52	55282.50	62.50	55282.50	
-	-	496.00	349.92	173560.32	496.00	173560.32	
-	-	45.00	1801.44	81064.80	45.00	81064.80	
-	-	440.00	984.96	433382.40	440.00	433382.40	

Sl No	Item Name	U
31	Fabricating, providing and erecting in position **Hot dip galvanised Gate**. Using 72 X 72 X 4.8mm Sq. GI Pipe Frame with Top pipe bending in heavy duty hydraulic press with sand packing and hot bending to form double arch as per drawing profile, 20mm hot dip galvanised sq. rod for verticals at 150mm c/c, as shown in the drawing including providing hot dip galvanised forged ornamental design in between sq. rods and heads at top, middle and bottom. Intermediate supports of 75X12 mm and 50X6 mm arch bend to hot dip galvanised flats. The work is inclusive of throughing GI flat GI sq. rods, placing, welding all the joints including grinding, finishing metal putty, painting two coats enamel painting. The rate is inclusive of all materials like GI sq. pipe, GI sq. rods, GI forged designs etc., heavy duty hinges are made out of 75mm solid sq. block assembled with 20mm dia bearing in three places for each flop. Heavy Duty Locking arrangements at tow places including cost of labour, painting, erecting charges using hoist pulley cranes with all lead and lift, loading, transportation, unloading, scaffolding charges and all other incidental charges for successful completion of the work as per directions of the Engineer-in-charge of the work. (Data Rate)	Sq
32	Fabricating, providing and erecting in position of MS Hot Dip Galvanised Sq. Hallow Poles of 132 X 132 Heavy gauge of length 3000mm with MS. Hot dip Galvanised grill work as per approved design and drawing of chief architect. Using 12 X 75mm galvanised flat for alround frame and 20 X 20mm galvanised forged design with square for vertical at 150mm c/c as shown in the drawing including providing forged ornamental arrowhead at top and bottom. The work is inclusive of throughing flat, square rods, placing welding all the joints, including grinding, finishing 2 coats of anticorrosive paint over one coat of metal primer. The rate is inclusive of all materials like MS. Hollow galvanized pipe, flats, forged square rods, cost of labour for all items of work cost painting, welding, cutting, grinding with all lead and lift as per specification including loading and unloading with cost and conveyance of all materials, labour, machinery andincidental charges for the successful completion of the work as per the direction of the Engineer-in-charge of the work. (Data Rate)	Sq
33	KSRB-3.2: Providing and injecting chemical emulsion for Pre-constructional Anti-Termite Treatment, creating continuous chemical barrier under and around the column pits, walls, trenches, basement excavation, top surface of the plinth filling, junction of wall and floor, along the external perimeter of building, expansion joints, over the top surface of consolidated earth on which apron is to be laid, surrounding of pipes and conduits, with chloropyriphos emulsifiable concentrates of 20% concentration, including cost of chemical, diluting in water to one percent concentration, labour, HOM of equipments, complete as per specifications. (Plinth area of the building at ground floor only shall be measured) (P.No-9,I No-3.2)	Sq
34	KSRB 5-11 : Providing and constructing load bearing wall with solid concrete blocks of size 400x200x200 mm having block density not lessthan 1800 kg/m3 and having a minimum average compressive strength 5.00 N/mm2 confirming to IS 2185 (Part) : 2005 and constructed with CM 1:4 , as per IS 2572:2005 including cost of all materials, labour charegs, scaffolding, curing complete as per specifications. KBS No.5.4 (I No-5.27.1,P No-25)	Sq

Previous Measurements		Present Measurements			Total Up to Date		Remarks
Qty	Amount	Qty	Rate	Amount	Qty	Amount	
-	-	22.73	12475.03	283557.43	22.73	283557.43	
-	-	325.38	9144.14	2975320.27	325.38	2975320.27	
-	-	511.70	111.24	56921.51	511.70	56921.51	
-	-	180.39	1011.96	182547.46	180.39	182547.46	